

10-Channel Rental System

The RNAS Remediation Products 10-Channel Injection System is an easy-to-use equipment package for electron donor injection into multiple wells. The rental system includes two water-driven proportional feeders, a distribution manifold, hoses, flow meters, and wellhead fittings that allow the user to inject into ten wells simultaneously. The system is mounted on an aluminum strut frame with locking castors so that it can be easily moved between locations. Two types of proportional feed equipment are available allowing for electron donor feed rates ranging from 0.4% to 10% by volume and total injection flow rates of 40-60 gallons per minute. Two Dosmatic Feeders are mounted in parallel flow to maximize total flow rates.

Highlights and Features

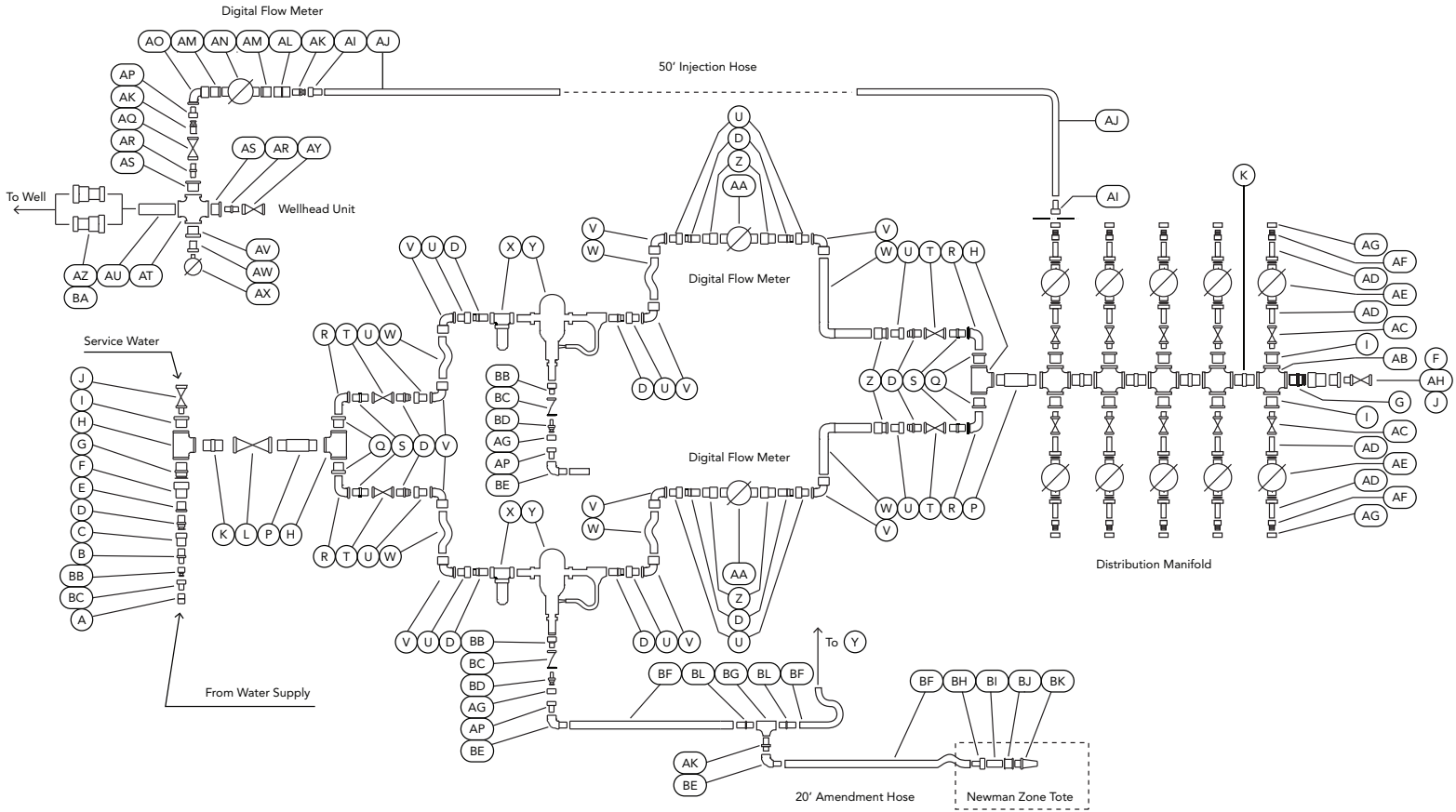
- Adapters allow various water supply connections including garden hose, or camlock connections: ¾-inch, 1-inch or 1.5-inch male camlock fittings.
- Wellhead fittings attach to 1-inch or 2-inch well casings with compression fittings.
- Globe valves, pressure gauges and digital flow meters on the wellhead fittings allow for easy pressure and flow control at each injection point to maximize injection rates while protecting well seals.
- Digital totalizing flow meters (resettable - gallons delivered) make it easy to track injection volumes at each well.
- Mechanical flow meters on the manifold combined with the digital wellhead flow meters on the wellhead provide redundancy and allow for flow rates as between 0.25 gpm and 30 gpm per well.

Water Supply Requirements and Injection Pressure Recommendations

Typical wellhead injection pressures are 5 psig to 20 psig. Wellhead pressures above 20 psig may result in failure of the compression coupler seals – maximum wellhead pressure should be limited in shallow wells to prevent failure of well seals. The Dosmatics are mechanical feeders driven by water pressure and flow, and require a minimum of 10 psig of pressure across the feeder to operate properly. The manifolds, flow meters and hoses have additional flowing head losses. We recommend a water supply pressure of 30-50 psig at the system inlet to provide for flowing head losses and the wellhead pressure. Do not exceed the maximum operating pressure of the Dosmatic feeders.

Feeder Model	Flow Rate	Injection Rate	Operating pressure
<i>SuperDos 20</i>	0.05-20 GPM	2-10 %	5-65 psi
<i>SuperDos 30</i>	0.15-30 GPM	0.4-5 %	5-100 psi





ITEM	SIZE	SIZE	SIZE	SIZE	SIZE
A	Swivel hose to pipe fitting NHF x NPT (F)	3/4" x 3/4"	W	TigerFlex hose	1"
B	Polypropylene reducing nipple MPT	1 x 3/4"	X	Banjo Poly T-Strainer - FPT	1"
C	Banjo FPT x Coupler	1"	Y	Dosmatic A20-10% Pump	-
D	Banjo MPT x Adapter	1"	Y	Dosmatic A30-5% Pump	-
E	Polypropylene reducer bushing MPT x FPT	1 1/2" x 1"	Z	Sch 40 PVC female adapter Socket x FPT	1"
F	Banjo FPT x Coupler	1 1/2"	AA	Paddle wheel flow meter w/totalizer	1"
G	Banjo MPT x Adapter	1 1/2"	AB	Std galv mall cross	1 1/2" x 1"
H	Std galv mall tee	1 1/2"	AC	Forged brass ball valve MPT x FPT	3/4"
I	Std galv mall hex bushing	1 1/2" x 3/4"	AD	Water meter installation coupling	3/4" x 5/8" x 3/4"
J	Bronze std hose bib MPT x Garden Hose	3/4"	AE	Water meter, brass, 1/4 - 20gpm	5/8" x 3/4"
K	2" s/40 galv stl nipple tbe	1 1/2"	AF	Banjo FPT x Adapter	3/4"
L	WGV IPS gate valve	1 1/2"	AG	Banjo dust cap	3/4"
M	2-1/2" ss 1/4 LM LF 0-100 gauge LF25S-1	-	AH	Polypropylene reducer bushing MPT x FPT	1 1/2" x 3/4"
N	2-1/2" ss 1/4 LM LF 0-60 gauge LF25S-1	-	AI	Banjo Hose x Coupler	3/4"
O	Watts 009M2QT backflow preventer	1 1/2"	AJ	Reinforced clear vinyl tubing	3/4" ID
P	12" std galv stl nipple tbe	1 1/2"	AK	Banjo MPT x Adapter	3/4"
Q	Std galv mall hex bushing	1 1/2" x 1"	AL	Sch 40 PVC female adapter Socket x FPT	3/4"
R	Std galv mall 90 st ell	1"	AM	Sch 40 PVC reducing bushing Spigot x Socket	3/4" x 1/2"
S	Close s/40 galv stl nipple tbe	1"	AN	Paddle wheel flow meter w/totalizer	1/2"
T	FBV-3 IPS/F/P ball valve	1"	AO	Sch 40 PVC 90 elbow Socket x FPT	3/4"
U	Banjo MPT x Coupler	1"	AP	Banjo MPT x Coupler	3/4"
V	Sch 40 PVC 90 elbow Socket x FPT	1"	AQ	Ashai/America globe valve	3/4"
			AR	Sch 80 PVC close nipple	3/4"
			AS	Sch 40 PVC reducing bushing Spigot x FPT	1 1/2" x 3/4"
			AT	Sch 40 PVC cross Socket	1 1/2"
			AU	Sch 40 clear PVC pipe	1 1/2" OD
			AV	Sch 40 PVC reducing bushing Spigot x Socket	1 1/2" x 1"
			AW	Sch 80 PVC reducing bushing Spigot x R FPT	1" x 1/4"
			AX	Pressure gauge, 0-30 psi, glycerine filled	2"
			AY	Ball valve, brass	3/4"
			AZ	Wellhead compression fitting	1 1/2" x 1"
			BA	Sch 40 PVC compression coupler	1"
			BB	Suction tube fitting	1 1/2"
			BC	Plastomatic diaphragm check valve	1/2"
			BD	Banjo MPT x Adapter	1/2"
			BE	PVC elbow Insert x FPT	3/4"
			BF	Clear vinyl tubing	3/4" ID
			BG	Sch 40 PVC tee FPT	3/4"
			BH	PVC female adapter Insert x FPT	3/4"
			BI	4" std galv stl nipple tbe	1 1/2"
			BJ	Std galv mal coupler	3/4"
			BK	Suction line strainer	3/4"
			BL	PVC male adapter Insert x MPT	3/4"